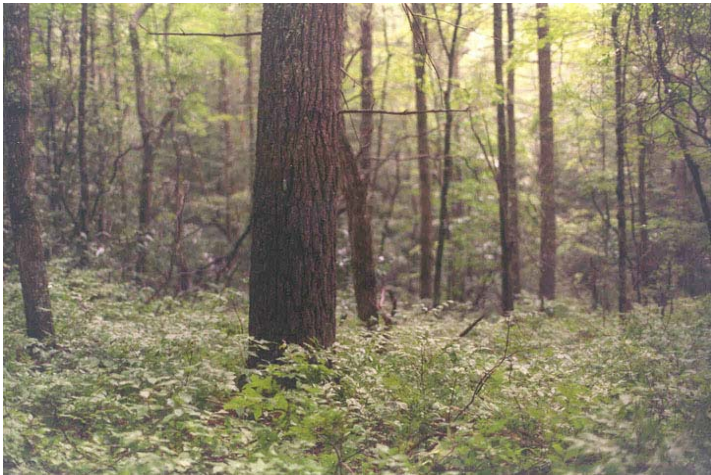


Great Smoky Mountains National Park
photographs of
***Pinus strobus* - *Quercus (coccinea, prinus)* / (*Gaylussacia ursina* -
Vaccinium stamineum) Forest**



***Pinus strobus* - *Quercus (coccinea, prinus)* / (*Gaylussacia ursina* - *Vaccinium stamineum*) Forest**

***Pinus strobus* - *Quercus (coccinea, prinus)* / (*Gaylussacia ursina* - *Vaccinium stamineum*)
Forest**

COMMON NAME	Eastern White Pine - (Scarlet Oak - Rock Chestnut Oak) / (Bear Huckleberry) Forest
SYNONYM	Appalachian White Pine - Xeric Oak Forest
PHYSIOGNOMIC CLASS	Forest (I)
PHYSIOGNOMIC SUBCLASS	Mixed evergreen-deciduous forest (I.C)
PHYSIOGNOMIC GROUP	Mixed needle-leaved evergreen - cold-deciduous forest (I.C.3)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (I.C.3.N)
FORMATION	Mixed needle-leaved evergreen - cold-deciduous forest (I.C.3.N.a)

ALLIANCE *Pinus strobus* - *Quercus (coccinea, prinus)* Forest Alliance

CLASSIFICATION CONFIDENCE LEVEL 1

USFWS WETLAND SYSTEM Upland

RANGE

Globally

This forest occurs in the low mountains of Georgia, North Carolina, South Carolina, and Tennessee, and could possibly range into Virginia.

Great Smoky Mountains National Park

This community was sampled on the Cades Cove quadrangle but was not found on the Mount Le Conte quadrangle. It is likely in other areas of the Park. On the Cades Cove quadrangle, it was sampled or observed north of the Cades Cove Loop Road, along the ridgeline of Tater Ridge (2500 feet); on the steep north-facing slopes off Crooked Arm Ridge (2400 feet); and on the north-facing slopes above Laurel Creek (2100 feet). It was also sampled southwest of the Cades Cove Loop Road, on low ridges (2000 feet) north and south of Abrams Creek, and on gentle, southwest slopes, east of Forge Creek Road (2000 feet).

ENVIRONMENTAL DESCRIPTION

Globally

This community occurs on exposed upper slopes and ridgetops at elevations below 920 m (3000 feet) in the southern Appalachian Mountains.

Great Smoky Mountains National Park

This community was found mostly below 2000 feet elevation (ranging from 1560 to 2400 feet) convex slopes and low ridges. Many stands showed evidence of past logging, and most examples are in early to middle stages of succession.

MOST ABUNDANT SPECIES

Globally

<u>Stratum</u>	<u>Species</u>
Tree canopy	<i>Pinus strobus</i> , (<i>Quercus prinus</i> , <i>Quercus coccinea</i>)
Subcanopy	<i>Oxydendrum arboreum</i> , <i>Acer rubrum</i> var. <i>rubrum</i>
Short shrub	<i>Gaylussacia ursina</i> , <i>Vaccinium stamineum</i>

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<u>Stratum</u>	<u>Species</u>
Tree canopy	<i>Pinus strobus</i> , <i>Quercus prinus</i>
Subcanopy	<i>Acer rubrum</i>
Tall shrub	<i>Kalmia latifolia</i> , <i>Rhododendron maximum</i>
Short shrub	<i>Gaylussacia ursina</i> , <i>Vaccinium pallidum</i>

CHARACTERISTIC SPECIES

Globally

Pinus strobus, *Quercus prinus*, *Quercus coccinea*, *Kalmia latifolia*, *Gaylussacia ursine*

Great Smoky Mountains National Park

See above

VEGETATION DESCRIPTION

Globally

Forest vegetation with *Pinus strobus* contributing 25-75 percent of the canopy coverage and with *Quercus prinus* and *Quercus coccinea* occurring singly or in combination as 25-75 percent of the canopy coverage. Open subcanopies are composed of *Oxydendrum arboreum*, *Acer rubrum* var. *rubrum*, *Nyssa sylvatica*, and *Cornus florida*. The shrub stratum is dominated by deciduous heath species, typically *Gaylussacia ursina* or *Vaccinium stamineum*. Other species in the shrub/sapling stratum may include *Vaccinium pallidum*, *Leucothoe recurva*, *Kalmia latifolia*, *Castanea dentata*, or *Acer rubrum* var. *rubrum*. On rocky sites, *Deschampsia flexuosa* may be common.

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Forests with a well-developed canopy and subcanopy dominated by *Pinus strobus*, codominating with *Quercus prinus* and *Acer rubrum*. Other species that can have high coverage in the canopy or subcanopy include *Quercus coccinea*, *Pinus rigida*, *Nyssa sylvatica*, *Oxydendrum arboreum*, and *Pinus virginiana*. Other trees that can be present include *Pinus echinata*, *Quercus alba*, *Quercus rubra*, *Amelanchier laevis*, *Carya glabra*, and *Tsuga canadensis*. The tall-shrub stratum can be moderately to very dense and is typically dominated by *Kalmia latifolia*, *Acer rubrum*, or *Rhododendron maximum*. The short-shrub stratum is dense and dominated by *Gaylussacia ursina* or *Vaccinium pallidum*. Other species that can be in the shrub strata include saplings of canopy and subcanopy species and *Vaccinium hirsutum*, *Vaccinium stamineum*, *Calycanthus floridus*, *Castanea dentata*, *Cornus florida*, *Ilex opaca*, *Magnolia fraseri*, *Pyrularia pubera*, *Robinia pseudoacacia*, and *Sassafras albidum*. The shrub stratum is sparse, and the ground is often dominated by leaf litter. Typical herb species include *Chimaphila maculata*, *Dioscorea quaternata*, *Epigaea repens*, *Galax urceolata*, *Gaultheria procumbens*, *Goodyera pubescens*, *Lysimachia quadrifolia*, *Pteridium aquilinum*, *Uvularia puberula*, and *Viola hastata*. *Smilax rotundifolia* and *Smilax glauca* are common vines.

OTHER NOTEWORTHY SPECIES

No information

CONSERVATION RANK G3

RANK JUSTIFICATION

This community has a restricted range and is uncommon. It is not threatened or particularly vulnerable.

DATABASE CODE C EGL007519

COMMENTS

None

REFERENCES

Patterson 1994, Schafale and Weakley 1990